

# THE BIRDS OF BOMBAY AND SALSETTÉ.

BY

SALIM ALI AND HUMAYUN ABDULALI.

## PART VI.

(Continued from p. 381 of this Volume).

### **The Indian Blue-breasted Banded Rail :** *Hypotaenidia striata striata* (Horsf.).

*Field identification:* Slightly smaller than the Partridge. A stub-tailed, long-legged marsh bird skulking about singly among reeds, etc. on the edge of tanks or water-logged paddy cultivation. Dark brown and olive-brown above, with white markings, ashy-grey and brown below with the abdomen and undertail barred white. Chin and throat white; crown rufous. Twitches its stub-tail up and down at every step. Flushed with difficulty. Slow laboured flight with legs trailing behind.

Noted and/or shot: Görēgāon and Fowāi Lake. Also at Kihim (Kolāba Dist.) across the Harbour, in a mangrove swamp.

Doubtless resident, though as yet we have no breeding records from our area.

### **The Spotted Crake:** *Porzana porzana* (Linn.).

*Field identification:* Size between the Quail and the Partridge. Reddish olive-brown above with black streaks; grey below. Speckled with white on breast, neck and upper back. Lower back, rump and upper tail coverts streaked narrowly with white. Similar in general effect and habits to the foregoing species. Singly, in reed-beds, etc. on the margins of tanks. A confirmed skulker.

Specimens: *B.N.H.S.*: ♀ 23-12-08 Malabar Hill, Bombay (J. C. G. Bowen); [o? Novem. 1893 Panwēl, Kolāba Dist. (W. S. Millard)].

Noted: Powāi Lake.

Winter visitor. Latest date 12 April. We have come across it only rarely, but Inverarity (*J.B.N.H.S.*, ii, 45—1887) says it is common round Bombay. It may well have been common before the low-lying marshy areas on the outskirts of the city and in the suburbs were reclaimed.

### **The Little Crake:** *Porzana parva* (Scopoli).

Specimens: *B.N.H.S.*: o? Malabar Hill, Bombay (A. H. A. Simcox).

We have not seen this specimen, but it is listed in the old Card Catalogue of the Society's Collection prepared by Mr. N. B. Kinnear. It may have been an aberrant cold weather straggler. We have not come across it in Salsette.

### **The Eastern Bailleon's Crake:** *Porzana pusilla pusilla* (Pall.).

*Field identification:* Size about that of the Quail. General effect and colouration as of the Spotted Crake but lacking the white speckles on neck, breast and back. Breast grey, belly barred black and white. White edge to first primary quill conspicuous and diagnostic. Singly, in marshy reed-beds. Same skulking habits.

No specimens. Noted at Powāi, Tūlsi and Vihār Lakes, Vilé Parlé.

Status? Common, at least in the cold weather. A great skulker, flushed only when almost trod upon, flying quail-like for a few yards before dropping into the reeds again.

So far we have no evidence of its breeding in our area.

### **The Ruddy Crake:** *Amaurornis fuscus fuscus* (Linn.).

*Field identification:* Like the Waterhen in general effect but somewhat smaller and predominantly chestnut and olive-brown with no white in face or

breast. The bright red legs are conspicuous even in flight. Singly, among reeds and thickets of rank vegetation about marshy ground and paddy-fields.

Specimen: *St. X. C.*: 266 ♂ 21-11-36 Powāi Lake (H. A.)

Resident (presumably). Rare. We cannot trace any records of its breeding within our limits.

**The White-breasted Waterhen:** *Amaurornis phoenicurus chinensis* (Boddaert).

Local name: *Kuku-komri*.

*Field identification:* Size about that of the Partridge. Upper parts slaty-grey with olive tinge. Face, neck and breast white. Abdomen and under tail rusty red. Long yellowish-green legs with long toes. The stub tail is held cocked up and is constantly flicked. Singly or pairs, in and about reeds and thickets by marshes and water-logged fields. Often seen on roads near tanks and lakes.

Specimens: *B.N.H.S.*: ♂ July '24 Kūrla; 3 downy chicks 10-9-24 Kūrla (near Mohili River—D. A. Baretto).

Resident. Common. Silent except during the monsoon when it breeds and is very noisy. The calls begin with loud raucous grunts, croaks and chuckles suggestive of a much larger animal (EHA compares it to 'a bear being roasted over a slow fire!'), and settle down to a monotonous metallic *ku-wak ku-wak ku-wak*, etc. somewhat like that of the Coppersmith but in a higher key and repeated more quickly. This is often kept up for over 15 minutes at a stretch on cloudy overcast days. The calling continues more or less throughout the night. The food consists of insects, molluscs, seeds and vegetable matter.

*Breeding:* Barnes (*J.B.N.H.S.*, vi, 39) found it breeding at Vihār Lake in August. In Salsette we have observed nests at Sion, Kūrla, Vilé Parlé, Andheri, Pāli Hill (Bandra) and Trombay in August and September, though it probably begins laying in July. The nest is placed in the interior of a hedge or small tree—up to about 15 ft. from the ground—on the margin of a pond, tank or water-logged paddy field. Sometimes it is well hidden by monsoon creepers, at other times fairly open and conspicuous. It is a shallow cup-shaped structure something like a crow's nest, composed of twigs, grass and flags of reeds and bulrushes. In days gone by, EHA found a nest at Girgaum built in the top of a date palm. There used to be some marshy land there devoted to paddy cultivation. We have taken a grass-lined nest built on the ground near water at Powāi with c/6. The normal clutch consists of 4 or 5 eggs. They are some shade of buff with longitudinal blotches of reddish-brown and pale purplish-grey. The birds (both sexes?) are close sitters and may sometimes be almost caught with the hand when brooding. The young are able to run as soon as hatched and follow the mother about. They look very like domestic chickens and are covered with uniform black down. Their bill and legs are blackish.

**The Indian Moorhen:** *Gallinula chloropus indicus* Blyth.

Mahrāṭṭi name: *Likeer*.

*Field identification:* Size about that of the Partridge. General effect of a waterhen on land, of a small duck on water. Slaty-grey and brown with white border to wing and white undertail. Singly or gregariously, among partially submerged rushes, etc. often swimming out into open water with floating vegetation. It swims well with a characteristic jerky motion of the head and stub tail.

Specimen: *B.N.H.S.*: ♀ 7-3-21 Thāna (B. C. Ellison).

Noted: Vilé Parlé, Santa Cruz, Powāi Lake.

Resident. Fairly common on Powāi Lake and in smaller numbers at most ponds and village tanks with floating or marginal vegetation. No breeding record for our area.

**The Kora or Water-cock:** *Gallinula cinerea* (Gmelin).

*Field identification:* Rather larger than the Partridge. Male in breeding plumage: Head, neck and lower parts chiefly black; above blackish-brown and slaty-grey. Covering the forehead and sticking up as a sort of casque or horn above the crown is a horny, red shield which is the most characteristic feature of the male watercock at this season. At other seasons the male is coloured like the female, brown and buff with wavy brown lines on the underparts. Singly, skulking amongst reedy marshes,

Specimens: *B.N.H.S.*: o? June 1895 'Bombay' (A. Francke); *St. X. C.*: 265 ♀ 21-11-36 Powāi Lake (H. A.).

Noted by us in Salsette only at Powāi Lake.

Resident. Not common. Shy. We have no records of nests in our area; but a male shot by H. A. at Powāi Lake on 16 July (1933) was evidently breeding. Its testes measured  $21 \times 13$  mm.

**The Indian Purple Moorhen:** *Porphyrio poliocephalus poliocephalus* (Lath.).

*Field identification:* A leggy bird the size of our domestic hen with long red legs, heavy red bill and a red horny shield covering the forehead. General effect of plumage purplish-blue. In swampy reeds and rushes on tank margins, etc., singly or gregariously.

Specimens: *B.N.H.S.*: o? 12-4-20 Kūrla (D. A. Baretto); [♀ 20-7-11 Panwēl, Kolāba Dist. (Mamlatdar, Penn.)].

Noted: Vihār and Powāi Lakes. In about 1887 Inverarity (*J.B.N.H.S.*, ii, 45) found large numbers on Bhiwandi tank on the adjacent mainland (beyond Thāna).

Resident, in small numbers. Navarro has taken nests with eggs at Talegaon in September along with Waterhens and birds of this kind, much persecuted by local gunners who consider it good eating.

**The Coot:** *Fulica atra* Linn.

Local name: *Poonār*; *Kām*.

*Field identification:* A slaty-black duck-like bird with ivory-white pointed bill and a white horny shield covering forehead. Gregariously—loose flocks—on tanks, swimming about like duck and pattering along the surface of the water when alarmed and trying to take wing.

Specimens: *B.N.H.S.*: ♀ 16-11-25 Kūrla (D. A. Baretto); [♀ 2-12-12 Bassein (R. dos Remedios)]; ♂ 6-12-18 Kolāba Cove, Bombay Harbour (J. A. D. MacBain).

Noted: Powāi and Vihār Lakes. Mahaluxmi (1938). This is one of the birds that is being shot out of the Bombay District by enthusiastic 'sportsmen'. It used to be not uncommon on every small village tank in Salsette about 25 years ago when S. A. shot it frequently at Santa Cruz, Vilé Parlé and Andhēri, but is now rarely seen. Inverarity (*J.B.N.H.S.*, ii, 45—1887) always found it on Vihār Lake and other tanks during the cold weather. EHA (*C.B.B.*, 176) also writes of it as very common everywhere in the neighbourhood of Bombay. In some years it is not uncommon on Powāi Lake even now.

Status? Mainly at least a winter visitor. We have only come across it here during the cold weather months. Strangely enough this bird, which often covers enormous distances on migration, can be caught by hand on a small tank. The procedure is to surround it and keep it on the move with stones, shouts, etc. After a while it usually sneaks into cover on land, whence it is easily beaten out and captured. There is a common belief that a coot cannot fly when its wings dry up!

*Breeding:* Not recorded in Salsette, but Major R. M. Betham (*J.B.N.H.S.*, xiv, 176) found several nests near Poona between 14 July and 17 August 1901.

**The Bronze-winged Jacana:** *Metopidius indicus* (Latham).

*Field identification:* Size about that of the Partridge. A leggy bird with shiny greenish-bronze wings, chestnut lower back, rump and stub-tail. Head and lower plumage glistening black. A conspicuous white stripe from eye to nape. Young birds are very different being chiefly whitish, rufous and brown. The most characteristic feature of the Jacanas—this and the next species—is their enormously elongated and slender toes which enable them to trip along gingerly over lotus leaves and other floating vegetation. Singly or gregariously, on ponds and tanks with waterlilies, Singāra (*Traça bispinosa*) and other aquatic vegetation.

Specimens: *B.N.H.S.*: ♂ imm., ♂ imm. 7-3-21 Thāna (B. C. Ellison); [♂ 7-12-09 Daman Road, Bombay (R. L. Sinclair)]; *St. X. C.*: 90 ♂—Powāi (H. A.).

Noted: Powāi and Tūlsi Lakes.

Resident. Fairly common.

*Breeding:* The nesting season is in the rains—July and August. The nests are partly submerged pads of rush-stems and weeds placed on floating vegetation

on tanks and ponds. The normal clutch is of 4 eggs. In colour these are buff or olive intricately pencilled with fine black lines. We have taken numerous nests at Powai. H. Bulkeley found two nests at Thana H. Wenden (*N. & E.*, iii, 357) found it breeding freely at Kaiyan, 32 miles from Bombay, in August.

**The Pheasant-tailed Jacana:** *Hydrophasianus chirurgus* (Scop.).

*Field identification:* Size about that of the Partridge. A striking chocolate-brown bird with white head, foreneck, throat and wings. Golden-yellow hind-neck. The long, pointed blackish sickle-shaped tail gives it its name. In non-breeding plumage the colour is chiefly pale brown and white; a black line runs through the eye down the side of neck and expands into a necklace on upper breast; the pheasant-tail is missing. In non-breeding season—gregarious, often in large flocks—on waterlily- and Singara-covered tanks. H. A. has observed one in Bandra Creek, and Sinclair (*J.B.N.H.S.*, i, 104) one on a rock on the seashore in Konkan!

Specimens: *B.N.H.S.*: ♂ 20-5-28 Malād (E. Henricks).

Noted: Bandra, Andhēri; Powai, Tūsi and Vihār Lakes.

Resident. Common. It has a peculiar nasal mewling call *tewn, tewn*, etc. commonly uttered in flight.

*Breeding:* The nest is a pad of rushes, etc. as of the Bronze-winged Jacana, placed on floating vegetation. We have seen eggs laid directly upon lotus and Singara (*Trapa*) leaves in a seemingly precarious situation. The eggs are peg-top shaped, usually olive-brown in colour, and match to perfection the decaying sodden leaves on which they rest. Brother Navarro found 2 nests with c/3 and c/4 on the lotus-covered tank near Bandra railway station on 18 September 1937. One of the owners took alarm at the thermometer fixed to determine the temperature of the sodden nest and next morning the eggs were found on another lotus leaf 5 feet away. On the thermometer being shifted to this site the eggs were found to have been removed to a newer position about 2 feet away on the following day. How are the eggs moved?

**The Painted Snipe:** *Rostratula benghalensis benghalensis* (Linn.).

*Field identification:* Slightly larger than the Quail. A leggy typical rail. Above chiefly metallic olive-green with buff and blackish streaks and markings; lower plumage chiefly brown and white. A long slender snipe-like bill. The female is more showily coloured than the male. As with the Bustard Quail, she does all the courting and leaves the male to incubate the eggs and rear the young. Flushed singly or in wisps in swampy reed-beds and salt marshes by our creeks. Feeble, laboured flight, legs trailing behind.

Specimens: *B.N.H.S.*: ♀ 7-3-21 Thāna (B. C. Ellison), ♂ Decr. 1893, ♀ Decr. 1890 Bombay (E. L. Barton), ♀ 7-12-24 Kūrla (D. A. Baretto) juv. 29-10-14 Thāna (Counsel), juv. (in down) 15-10-24 Kūrla (S. A.) ♂ 8-12-25 Vilé Parlé (S. A.); *St. X. C.*: 101 ♀, 102 ♂ 3-10-33 Andhēri (H. A.).

Noted: Powai and Tūsi Lakes, Gödhbunder, Mullund.

Resident. Common. Stomachs of specimens examined by us contained remains of snails and orthopterous insects, and paddy grains.

E. Henricks, the Society's skinner, reported to us in June 1930 that he had caught at Malād an adult specimen which was unable to fly well due to some heavy weight attached to one of its feet. Examination showed a large Ampullaria shell adhering firmly to the middle toe of one foot. The operculum had closed when accidentally trod upon by the bird.

*Breeding:* It is not unlikely that the Painted Snipe breeds in Salsette throughout the year. We have not actually found any nests here but have taken ovarian eggs from a female shot on 12 April. The gonads of specimens were in breeding condition from the end of September to early May and we also found young in all stages during these months. *Stray Feathers* (vii, 526) records that on 1 December 1878 J. D. Inverarity caught two half-grown chicks, unable to fly, at Gödhbunder. The nest is a pad of grass or rushes with a slight depression in the centre in which normally 3 or 4 eggs are laid. They are some shade of yellowish-stone colour, blotched and streaked with brown. The nest is usually placed on the ground in grass on the edge of a marsh, on bunds, etc.

**The Indian Sarus Crane:** *Antigone antigone antigone* (Linn.).

*Field identification:* A large grey stork-like bird with long bare red legs and naked red head and neck. Usually pairs, stalking about cultivation and marsh land.

Aberrant straggler. Owing to the severe drought in Gujerat and the Deccan, several of these birds were seen in and near Bombay during the cold weather of 1900. H. S. Symons (*J.B.N.H.S.*, xix, 261) records seeing a solitary bird at Santa Cruz on 9-12-08. A few days previous to this he had seen a dead Sarus near Bandra railway station and conjectures that this may be the other of the pair. He mentions that once before he had seen this species at Panwēl (Kolāba Dist.) in 1897 which was also a famine year upcountry. We have no more recent records from Salsette.

The Sarus is common in Gujerat where it is clothed in sanctity and protected by the inhabitants.

**The Demoiselle Crane:** *Anthropoides virgo* (Linn.).

Aberrant straggler. Following the severe drought in Gujerat and the Deccan, several birds were seen in Bombay during the cold weather of 1900. Not recorded since.

**The Lesser Florican or Likh:** *Sypheotides indica* (Miller).

*Field identification:* Slightly larger than the Red-wattled Lapwing and somewhat similar to it in general effect. Male black and white with curious black ear-plumes sticking out behind head. Female brown above finely stippled and pencilled with black; buffy-white below. In stretches of tall grassland.

Specimen: *B.N.H.S.*: ♂ imm.—Bombay (N. C. Macleod).

Rare straggler? Kinnear calls it 'an uncommon cold weather visitor', but as will be seen, the records are not confined to that season. Single birds have been observed from time to time, the records for our area and the adjacent mainland being as follows:

**Bombay and Salsette:**

Mahaluxmi, ca. 1889 (H. S. Symons, *J.B.N.H.S.*, xix, 261).

Between Andhēri and Malād, December 1912 (M. F. Suter, *ibid.*, xxii, 631).

♀ Catholic Gymkhana Grounds, Kennedy Sea Face 4-9-18 (N. Marryat, *ibid.*, xxvi, 674).

Near Churchgate Railway Station, 8-6-13 (*Times of India* of 10-6-13).

**Mainland:**

Panwēl 17-1-09 (H. S. Symons, *J.B.N.H.S.*, xix, 261).

♀ Between Māndwa and Alibāg, 16-12-12 (C. D. Baker, *ibid.*, xxii, 202).

♀ Karjat (foot of Bhōr Ghat) 20-1-35 (J. Stokoe, *ibid.*, xxxviii, 191).

♀ Chinchavli near Neral, Nov. 1908 (M. F. Suter, *ibid.*, xxii, 631).

Kalyan, December 1912 (H. A. W. Brent, *Times of India* of 11-6-13).

H. A. saw a single bird near Chōndi (Alibāg Taluka) on 30-5-38.

**[The Great Stone Plover:** *Esacus recurvirostris* (Cuvier).

*Field identification:* Size about that of the domestic hen with long bare yellowish-green legs. Pale greyish-sandy above, white below. Some black in wings and a conspicuous black streak through eye. Largish head, thick, pointed somewhat upturned bill and round greenish-yellow goggle eyes. Singly or pairs, near rivers and tanks.

Specimen: *B.N.H.S.*: ♀ 22-11-21 Panwēl, Kolāba Dist. (E. L. Barton).

Status? Rare. We have only come across a solitary example on the mangrove marsh bordering Dharamtar Creek, near Rēwās Pier (12-3-30). J. D. Inverarity (*J.B.N.H.S.*, ii, 45, 1887) shot a specimen at Panwēl, this being the only occasion on which he saw one. Not recorded in Salsette.]

**The Indian Stone Plover:** *Burhinus oedichenemus* ssp.

*Field identification:* Size slightly larger than the Partridge, and much more leggy. Singly or in small flocks essentially in dry, open scrub country.

Status? We have few definite records from Salsette. An enthusiastic 'shikari' once claimed to have shot some 'wood-cock' near Powāi and his description fitted this species beautifully! Mr. McCann caught one of these birds in Bombay City some years ago, and recently saw one at Marōl (December).

*Breeding*: Brother Navarro took several nests at Khandala (W. Ghats ca. 2,000 ft.) in April and May. The usual clutch is of 2 eggs, laid on the bare stony ground.

**The Indian Courser:** *Cursorius coromandelicus* (Gmelin).

*Field identification*: Size about that of the Partridge. General appearance somewhat like the Red-wattled Lapwing. Long, bare china-white legs. Upper plumage sandy brown with some black in the wings. Crown rich rufous. A black band through eye running down neck. A broad white stripe parallel to this band above the eye continuing down neck. These black and white bands are a conspicuous feature. Chin and throat white, breast chestnut, abdomen black. Singly, pairs or small parties, on open dry fallow land or ploughed fields. Running along at speed, stopping abruptly and erect and then resuming the run.

Specimens: *St. X. C.*: 2 ♀ juv., 3 ♀ juv., 3-6-33 An dh ě ri (H. A.).

Resident? Not common. H. A. observed a flock of some 40 birds about the base of Gilbert Hill, An dh ě ri (23-4-30). The next day there was only a single pair at that spot. The birds may be seen occasionally at the 'Kutcherpatti' on Trombay Island.

*Breeding*: That they breed in Salsette, occasionally at least, is evidenced by the juvenile specimens obtained on 3 June. The young birds are buff-coloured, barred on the upper parts with black presenting a mottled appearance. Iris dark grey. They had fed on small coleoptera and green caterpillars.

We have no other record for Salsette. Brother Navarro has taken nests at Khandala and Lonavla in June.

**The Large Indian Pratincole or Swallow-Plover:** *Gareola maldivarum maldivarum* (Forster).

Sinclair (*J.B.N.H.S.*, iii, 69) records shooting this species at Rewādanda. At Kihim (also in Kolāba Dist.) H. A. observed a flock of pratincoles, presumably this species, flying South over the sea along the coast at sunset (29-12-31). He noted the birds again on 30 December and 1 January (1932).

[**The Crab Plover:** *Dromas ardeola* Paykull.

*Field identification*: A lonely black and white bird, about the size of a domestic hen, with heavy crow-like beak, on seashore or tidal mudflats.

H. A. shot an example on the seashore near the fishing village of Thal, Kolāba Dist., on 26-10-30. He observed another near Rewās Pier (Dharamtar Creek) on the same date 5 years later.]

**The Great Black-headed Gull:** *Larus ichthyætus* Pallas.

*Field identification*: A large sea bird, in size between a duck and a goose. Pale grey above with black head and neck, white underparts and short orange-yellow legs. The toes are webbed like a duck's. In winter plumage which is mostly white the birds are with us, the head and neck are white, much streaked with black. Large size distinguishes it unmistakably from other gulls. Usually singly, about the Harbour and sea-coast, flying majestically or perched on the buoys.

Specimen: *B.N.H.S.*: ♂ 12-3-99 Trombay Island, Bombay Harbour (H. J. Walton).

Noted: About the docks, and Pir Pao (Salsette); Mibāg, Janjira, Rewādanda.

Winter visitor. Not common but frequent.

**The Black-headed Gull:** *Larus ridibundus* Linn.

*Field identification*: Similar to above but smaller. Size somewhat less than the domestic duck. The so-called black head is in fact chocolate-brown deepening to blackish on hindneck and lower throat. While with us the birds are mostly in winter plumage when the head is greyish-white. A vertical crescent-shaped black patch is conspicuous about the ear-coverts. Gregoriously, often large numbers in association with the next species, about the docks and in the Harbour picking up floating refuse from ships. Also about fishing villages or following fishing boats returning from the catch.

Specimens: *B.N.H.S.*: 11 collected in Bombay Harbour between 28 December and 12 March.

Noted: Mahim and Sion Creeks.

Winter visitor. Fairly common. Latest date 4 April.

**The Brown-headed Gull:** *Larus brunicephalus* Jerdon.

*Field identification:* Practically indistinguishable in size and colour from the above, especially in winter plumage. Doubtless often confused with it. In full summer dress the head is more greyish-brown than chocolate. In *ridibundus* the first primary is white with black edges and tip: in this species it is black with a white subterminal band. Habits, etc. as above.

Specimens: *B.N.H.S.*: ♂ 10-3-25 Bombay Harbour (C. McCann); [♀ 4-4-30 Alibāg (S.A.)].

Winter visitor. Bearing in mind the everpresent possibility of confusion it is our impression that this species is less common round Bombay than the Black-headed Gull. On the South Konkan Coast, however, Vidal (*S.F.*, ix, 94) considered it abundant and *ridibundus* very rare. Hume also definitely asserts (*S.F.*, iv, 414, 1875) that *brunicephalus* is commoner in Bombay Harbour than *ridibundus*.

**The Sooty Gull:** *Larus hemprichii* Bruch.

Aberrant straggler. The only record for Bombay we know of is the solitary specimen seen by Hume on some rocks in the Harbour in January 1875 (*S.F.*, iv, 414).

**The Eastern Herring Gull:** *Larus fuscus taimyrensis* Buturlin.

*Field identification:* Rather larger than the three foregoing. In adult plumage dark slaty-grey above, white below with black in the flight feathers. In winter the head and neck are streaked brown; in summer they are white. Immature birds are dark brown with white streaks above and the white lower parts are mottled and streaked with pale brown. Gregariously, about docks and in the Harbour, and around fishing villages.

Specimens: *B.N.H.S.*: ♂ ♀ 9-3-14, ♀ 2-2-17, ♀ ♀ 23-1-10, ♂ ♂ 21-2-17 Bombay Harbour (S. H. Prater); ♂ 26-3-99 Bombay Harbour (Major H. J. Walton).

Winter visitor. Fairly common. Large numbers are occasionally seen about the fishing village of Dānda—near Bandra.

**The Yellow-legged Herring Gull.** *Larus argentatus cachinnans* Pallas.

*Field identification:* Very similar in size and colouring to the last and difficult to differentiate from it in the field. Somewhat paler grey above. Habits, etc. same as with other gulls.

Specimen: *B.N.H.S.*: ♀ 21-2-17 Bombay Harbour (S. H. Prater).

Winter visitor. Fairly common. Latest date 29 March.

**The Indian Whiskered Tern:** *Chlidonias hybrida indica* (Stevens).

*Field identification:* Size about that of the pigeon. A slender, graceful bird with long, pointed wings and an exceptionally square tail. In summer, plumage pale ashy grey above, white below gradually shading into black on abdomen and under tail. A velvety black cap. In winter, i.e. mostly while the birds are with us, the crown is white as are the entire lower parts. Only the hindcrown and nape are black-streaked or wholly black. Bill, legs and feet red. Gregariously, about tanks, marshes and creeks either flying back and forth at moderate heights scanning the water below for food or resting on some mudbank on their ridiculously short legs. They hurl themselves down on a fish or tadpole swimming near the surface or swoop gracefully on sand crabs, etc. and bear them away in their bills.

Specimens: *B.N.H.S.*: ♂ 22-9-24 Kūrla (D. B. Baretto); *St. X. C.*: [120 ♂, 121 ♂ 13-10-33 Bassein, Thāna Dist. (H. A.)].

Noted: Powāi Lake, Gōdhbunder and Sion Creeks.

Status? Mainly winter visitor. Fairly common. We have noted individuals as early as 4 August and as late as 11 June. Do occasional birds or pairs stay with us throughout the year? And breed? A large flock at Powāi Lake

on 4 May was evidently on passage. A female shot from this showed no gonadal development.

**The Gull-billed Tern:** *Gelochelidon nilotica nilotica* (Gmelin).

*Field identification:* Somewhat larger than the Whiskered Tern. Same general effect and habits but can usually be distinguished at a distance from other grey-and-white terns by its black bill, legs and feet.

Specimens: *B.N.H.S.*: ♀ 8-12-99 Bombay Harbour (E. Comber); ♀ 28-12-13 Bombay Harbour (N. B. Kinnear); ♂ 19-11-17 Kurla (S. H. Prater); ♂ 1-9-18 Bhyandar (A. P. Kinloch).

Noted: Bandra, Vilé Parlé, Andhēri, Sion, Gödhbunder—about creeks and mudflats.

Winter visitor. One of our commonest terns. By about the end of August the birds are well in. Numbers may still be met with at the end of May, while we have records of individual birds on 16 June, 23 and 24 July.

**The Indian Lesser Crested Tern:** *Thalasseus bengalensis bengalensis* (Lesson).

*Field identification:* Size and general effect that of the Gull-billed Tern. Distinguishable by its yellow bill and black legs and feet. Usually met at sea some distance from the shore, and also on the larger tidal creeks. The call *cher-ruk* while fishing in the manner of a Pied Kingfisher is characteristic.

Specimens: *B.N.H.S.*: ♂ 20-6-11 Bombay Harbour (S. H. Prater); ♀♀ 5-3-99 Bombay Harbour (Major H. J. Walton).

Winter visitor, principally. Not common. We have observed it when crossing the Harbour by the ferry service, and the bird becomes quite common as one goes further south.

**The Little Tern or Ternlet:** *Sterna albifrons albifrons* Vroeg.

*Field identification:* Differentiated from all our other terns by its small size which is about that of the Ring-Dove though the long wings and forked tail make it appear bigger in flight. Bill, legs and feet orange-yellow.

Specimens: *B.N.H.S.*: 3 ♀ and 1 ♂ 25-5-37 (H. A. and McCann).

Resident or breeding visitor? It is surprising that no specimens of the Little Tern had been taken, or the birds met with on our shores until the remarkable discovery recently of a nesting colony by Brother Navarro of St. Xavier's College. On 25 May 1936 Br. Navarro was rowed out by fishermen from Gorai, north of Manori Creek in Salsette, to a small rocky islet some 2-3 miles from the shore. This islet was crowded with Little Terns, the ground being covered with their nests mostly containing 3 eggs each. The fishermen collected close on 200 eggs. According to their testimony the birds had been breeding on this islet for years.

On 28 May of the following year H. A. visited this island again with Mr. McCann and Br. Navarro. The approach is extraordinarily difficult at this season, as the coast is rocky and a third of the island, which is less than 200 yards square, was covered by the tide. We anchored a couple of hundred yards off the rock, and waited for the tide to go down. Large flocks of these terns could be seen flying over the rock, and occasionally, they would cover some distance out to sea. No birds however came within gunshot, and we decided to swim the last hundred yards. The shore is extremely rocky, but there were two or three patches of level ground covered with a straggly growth of grass. The birds were not wild, and sat on their eggs 2 to 3 feet from one another. There must have been over a hundred nests. The eggs, 2 to 3 in number, were laid on the bare shingle, and one had to walk cautiously, to avoid stepping on them. They were all fresh. We shot a few specimens, and the birds became much wilder, and it was with some difficulty that we secured photographs of the birds at their nests. We saw no other birds except a *Thalasseus bergii* which just flew over the island.

On our return from the islet, a special watch for these Ternlets was kept, but we saw only a few stragglers, beating up and down the shore at evening. As there are no other records of this bird from our area it would appear that the species is possibly a breeding visitor only.

**The Red Sea Brown-winged Tern:** *Sterna anaetheta fuligula* Licht.

*Field identification:* Size about that of the Whiskered Tern, but with upper parts dark brown instead of grey. The black crown of the summer



plumage is brown in winter with white edging to the feathers. The bill, legs and feet are black as in the Gull-billed Tern.

Specimens: *B.N.H.S.*: ♂? 23-9-18 Colāba, Bombay (Lieut. Tebbut); *St. X. C.*: 83 ♂, 84 ♀, 85 ♂ 17-9-33 Bandra.

Winter visitor. Not common. The St. Xavier's College specimens were captured by hand during the monsoon. They apparently were stragglers blown in by a gale. One was shot at Bandra on 15-11-38. The birds that Hume found breeding on the Vengurla rocks belong to the southern race *S. a. antarctica*.

[**The Indian Sooty Tern:** *Sterna fuscata infuscata* Licht.

*Field identification*: Size about that of the Gull-billed Tern. Upper parts deep chocolate brown. The black crown of the summer plumage is streaked with white in winter. Bill, legs and feet black.

Specimen: *B.N.H.S.*: ♂?—Alibāg, Kolāba Dist. (W. F. Sinclair). Straggler. No other records.]

[**The Indian Skimmer:** *Rhynchopts albicollis* Swains.

*Field identification*: A tern-like black, white and brown water bird chiefly remarkable for its orange-red scissor-shaped bill with the lower mandible compressed like a knife-blade and projecting much beyond the upper.

Specimen: *B.N.H.S.*: ♂? March 1890 Alibāg, Kolāba Dist. (E. L. Barton).

Straggler. The only record from our neighbourhood.]

Hume records (*S.F.*, iv, 414) meeting a single Caspian Tern (*Hydroprogne caspia*) and the Crested Terns (*Thalasseus bergii*) evidently in some numbers, near the Prongs Lighthouse and Colāba Point in January 1875. *T. bergii* is common further south.

**The Turnstone:** *Arenaria interpres interpres* (Linn.).

Hume (*S.F.*, iv, 414) found the Turnstone 'pretty abundant' all round Bombay Island and other islands in the Harbour in January 1875. We have no more recent records.

**The Western Grey Plover:** *Squatarola squatarola squatarola* (Linn.).

*Field identification*: A little larger than the Golden Plover, and much paler. In the hand, the presence of a tiny hind toe distinguishes it from that species. Noted and/or shot: Malād (Salsette); Kihim (across Bombay Harbour).

Winter visitor. Not uncommon. Small parties—never large flocks—on seashore or by mangrove-fringed creeks and tidal mudflats.

**The Oyster-Catcher or Sea-Pie:** *Haematopus ostralegus longipes* Buturlin.

*Field identification*: Somewhat larger than the Partridge. A striking black and white wading bird with longish bare red legs and long, straight, moderately slender orange-red bill. Usually small flocks amongst rocks on the seashore and tidal mudflats.

Specimens: *B.N.H.S.*: ♂? October 1893 Alibāg, Kolāba Dist.; *St. X. C.*: 178 ♂? 22-10-33 Alibāg (H. A.).

Winter visitor. Common. Usually extremely wary. We have observed the birds here as early as 28 September and as late as 29 May. EHA (*C.B.B.*, 165) even saw a flock of about 15 not far from Bombay on 29 June. Hume (*S.F.*, iv, 414) noted several in Back Bay in January 1875. Their call notes resemble those of the Whistling Teal and in fading light when the birds are flying towards or away from one the effect is very teal-like.

**The European Little Ringed Plover:** *Charadrius dubius curonicus* Gmelin.

*Field identification*: Somewhat smaller than the Quail. A sandy-brown shore bird with a white forehead, black forecrown, earcoverts, around eye and a black collar round the white neck. Underparts white. Legs yellowish or greenish-grey. A typical plover with a thick head, large eyes and short stout bill. Small flocks on the seashore and tidal mudflats.

Specimens: *B.N.H.S.*: ♂♂ 6-1-24 Sion Causeway (S. A.); ♀ 25-10-24 Kūrla (D. B. Baretto); ♀ 26-1-14 Colāba (S. H. Prater); *St. X. C.*: 36 ♀ 1-8-33, 105 ♀ 8-10-33 An dhēri (H. A.).

Noted: Mahāluxmi, Worli, Māhim, Dānda, Bhyandar, Trombay, Kihim, etc. EHA (C.B.B., 164) mentions flocks frequenting the Esplanade Maidan.

Winter visitor. Common. Earliest date 11 August; latest 6 April. Flocks are commonly to be seen about the mudflats and salt pans in Salsette running along swiftly, feeding in company with Stints and other waders. In this environment their colouration is remarkably obliterative and it is often quite impossible to pick out a bird, even at close range until it moves.

We have no authentic record of the very similar Jerdon's Little Ring Plover (*C. d. jerdoni*) from our area. This race, as a rule, prefers the shingly banks and beds of rivers, streams and tanks inland.

Navarro has several records of this bird breeding at Khandala in June.

**The Pamirs Lesser Sand-Plover:** *Charadrius mongolus atrifrons* Wagler.

*Field identification:* Slightly larger than the foregoing. Ashy brown above pale rufous and white below. Head markings more or less like the Ring-Plover's, but lacking the white collar on hindneck. In winter plumage, while with us, the forehead, etc. are fulvous instead of black and the rufous of breast and flanks lesser in extent. Legs and feet greenish-grey, bill black. Flocks, running about feeding on sandy seashore especially between the tide marks. Also frequents tidal mudflats by creeks, etc.

Specimens: *B.N.H.S.*: ♂ 14-3-26 Bhyandar (S. A.); ♀ 25-10-24 Kūrla (D. B. Baretto); ♀ 28-9-13 Manori Creek (Dr. F. M. Suter); *St. X. C.*: 79 ♀, 80 ♂ 20-9-33 Versova mudflats (H. A.).

Winter visitor. Common and abundant. Earliest date 13 September; latest 14 March. Usually seen on the sea beach in mixed flocks with the Large Sand-Plover and other shore birds. The two species are in the proportion of something like 2 of *mongolus* to 1 of *leschenaulti*. They fly swiftly in close orderly formation all turning and twisting on the wing together with their white undersides glistening from time to time as the sun strikes them. When the flocks first arrive from their breeding grounds the birds have evidently not quite got over their 'territorial' instinct. Much rivalry is apparent and skirmishes are frequent. Their combats are as innocuous as amusing to watch. Two birds will run parallel to each other, heads lowered. Of a sudden one will turn on the other, rush at him with open wings and jump clean over him. Sometimes they vary these tactics and diverge as if oblivious of their adversary's proximity. Suddenly however they will wheel on each other and repeat the 'clinch'.

**The Large Sand-Plover:** *Charadrius leschenaulti* Lesson.

*Field identification:* Appreciably bigger than the Pamirs Sand-Plover and more rufous-sandy above, but otherwise the two are alike.

Specimens: *B.N.H.S.*: ♂? 23-6-18 Bhyandar (Lieut. Tebbut).

Noted: Near Gödhbunder, Kihim, Alibāg, Karanja, Rewās, Rewādanda, Mūrūd (Janjira), etc.

Winter visitor. Common. Habits same as of the Lesser Sand-Plover. In the stomach of a specimen several of the beetles *Sphenoptera aenea* (Fam. Buprestidae) were found.

**The Eastern Golden Plover:** *Pluvialis dominicus fulvus* (Gmelin).

*Field identification:* Size about that of the Partridge. A typical plover with thick head, large eyes and short straight moderately stout bill. Mottled white, brown and golden-yellow above; black below. In winter the black is absent. Small parties or flocks on mudflats, etc. covered with short rank grass—moist lark country.

Specimens: *B.N.H.S.*: ♂ 2-11-08 Bhyandar (N. B. Kinnear).

Noted: Andhēri, Malād, Gödhbunder, Bassein, Rewās, Kihim, Alibāg (Sākar Creek), Dharamtar Creek. J. D. Inverarity observed it on the Mahāluxmi mudflats in October 1877 and shot a couple on the Race Course. In March 1883 he saw a flock of a dozen near the Race Course (*J.B.N.H.S.*, ii, 44).

Winter visitor. Not uncommon. We have observed a flock of about 25 and a party of 4 (in summer plumage) on 24 August and 17 July respectively. They are frequently seen in our neighbourhood as late as the first half of May. The stomach of a specimen contained tiny snails and slugs,

**The Sociable Lapwing:** *Chettusia gregaria* (Pallas).

*Field identification:* Slightly larger than the Partridge. A greyish brown plover with wings and tail partly white and partly black. Black crown, white forehead, the white continuing in a broad stripe above eye down almost to nape.

Specimen: *B.N.H.S.*: ♀ 7-12-99 Esplanade, Bombay (J. M. Mason).

Aberrant straggler. EHA (*C.B.B.*, 164) writes that in December 1899 when the famine in Gujerat and the Deccan drove many strange birds to Bombay for a living, a flock of 40 or 50 of these plovers appeared on the Esplanade and remained for some weeks. They attracted much attention and were productive of letters in the newspapers.

**The Indian Red-wattled Lapwing:** *Lobivanellus indicus indicus* (Bodd.).

Mahrātti: *Hoot-toot-ti*; Hindūstāni: *Titoti, Titwi*.

*Field identification:* Slightly larger than the Partridge and with longer legs and neck. Bronze-brown above, white below. Crown, throat and breast black. Lower back and tail white, the latter with a broad black cross-band. A crimson wattle or fleshy projection above and in front of each eye. Usually pairs or small parties, in open country near water. Familiar *Did-he-do-it?* calls.

Specimens: *B.N.H.S.*: ♂ 8-9-19 Bhyandar (A. P. Kinloch); [♀ 31-5-08 Vasind (S. H. Prater)].

Resident. Common.

*Breeding:* The earliest nest we have record of was on 29 March (Tūlsi Lake). The season is at its height between April and July. The nest is merely a natural depression or scrape in the ground, unlined, sometimes margined with pebbles or 'kankar'. It is usually situated on waste or fallow land more or less water-logged in the rains, and with deep imprints of cattle hoofs. The drying-up beds of village tanks also offer suitable sites. The normal clutch consists of 4 eggs, rather pointed at one end. In colour they are some shade of stone or grey-brown, blotched with blackish and match the ground to perfection. Indeed it is difficult to locate a nest even in a circumscribed area except by patiently watching the behaviour and movements of the owners. A successful method is to scan a likely patch from a distance with binoculars when the white on the head of the brooding bird will show up conspicuously. When suspicious the bird quietly slinks away from the nest with head held low between the shoulders only straightening itself up or flying off when some distance away. The colouration and markings of the newly hatched downy chicks of this Lapwing provide a very good example of Nature's camouflage. They are quite invisible at a couple of feet's distance when squatting or lying 'doggo' with neck outstretched. They run about freely picking up insects, etc., by themselves, to all appearances perfectly oblivious of possible danger, but respond mechanically to the alarm notes of their parents, squatting low beside a stone or clod and becoming completely invisible. When danger is past and immediately upon the signal from the parents—a series of high-pitched *clucks* as they wheel frantically overhead—they are up again and busy running about feeding with no semblance of caution on their own part. The parent birds launch fierce aerial attacks on crows, mynabs, kingfishers and even dogs and jackals that intrude into the proximity of their nest or young.

**The Yellow-wattled Lapwing:** *Lobipluvia malabarica* (Bodd.).

*Field identification:* Size about that of the Partridge, more leggy. Sandy brown above, white below with a black cap and bright yellow lapnets above and in front of the eyes. Chin and throat black. Neck and breast paler than upper plumage. Tail white with a broad black subterminal band conspicuous in flight. Legs and feet bright yellow. Pairs or small parties, on waste and fallow land—usually drier facies than the Red-Wattled Lapwing.

Specimens. *B.N.H.S.*: ♂ 6-4-13 Santa Cruz (N. B. Kinnear); [♂ 21-12-00 Revdanda, Kolāba Dist. (E. Comber)].

Noted: Andhāri; Kihim (Kolāba Dist.).

Resident. Uncommon. Its call is very different from that of the Red-wattled Lapwing. It is a plaintive *Ti-ee, ti-ee*, etc., punctuated by high-pitched quick-repeated titters *twit-twit-twit*, etc.

**Breeding:** We have no record from Salsette, but at Kihim (Kolāba Dist.) across the Harbour—S. A. found downy chicks about 3 days old, on 24-6-30 on the same stretch of hoof-pitted waste land as was being used by the Red-wattled species. The chicks were stippled black and rufous and harmonised with the soil so completely that after roughly marking down the spot it took fully 10 minutes to locate one within 2 feet of his boot! The chicks were lying 'doggo' on the bare uneven ground without stone or clod as shelter. When a chick is once spotted, the broad white collar on its hindneck is prominent thereafter.

The parent birds demonstrate in the same frantically vocal manner as the foregoing species when their nest or young are approached, flying in circles close overhead often making as if to strike the intruder.

Navarro has taken nests at Khandala in May.

**The Black-winged Stilt:** *Himantopus himantopus himantopus* (Linn.).

**Field identification:** Size about that of the Partridge. A striking wading bird of black and white plumage chiefly remarkable for the length of its thin pink or red legs—about 10 inches—which enable it to wade into fairly deep water and which trail behind conspicuously in flight. Its bill is black, straight and slender. Singly, pairs or small parties on salt pans and mudflats by tidal creeks.

Specimen: *B.N.H.S.*: ♂? 29-9-24 Kūral (D. B. Baretto).

Noted: Bhyandar, Bassein, Alibāg (Sakar Creek), Naugaon and Nagotna (Kolāba Dist.).

Local migrant? All our records are between 29 September and 6 November only. Not uncommon but patchy.

**The Avocet:** *Recurvirostra avocetta avocetta* Linn.

**Field identification:** Size of the Stilt. Black and white plumage, long bare bluish legs and slender, black upcurved bill make its identity unmistakable. Singly or pairs—occasionally parties—by creeks and on tidal mudflats usually in company with 'snippets'.

Specimens: *B.N.H.S.*: ♂ 12-11-25, ♀ 25-11-25 Kūral (D. B. Baretto); ♀ 11-3-04 Bombay (John Wallace); ♂ 27-2-15 Uran (A. H. A. Simcox); ♀ 6-12-18 Bombay Harbour (J. A. D. McBain); ♂ 23-9-18 Bhyandar (Lieut. Tebbut).

Noted: Bassein Creek (Thāna Dist.), Rewās mudflats, Sākar and Rewdānda Creeks (Kolāba Dist.).

Winter visitor. Sparingly but not uncommon. The feeding with the curiously shaped bill is effected as follows: The bill is directed against the ground obliquely so that the curved part skims the squelchy semi-liquid mud. The bill is then moved with a back and fore rotatory motion taking in small crustaceans, etc.

**The Eastern Curlew:** *Numenius arquata lineatus* Cuvier.

**Field identification:** Size about that of the domestic hen. A darkish sandy-brown bird streaked with black and fulvous to produce a game bird pattern, with white lower back and rump. Its most characteristic feature, however, is the curved slender bill 5 or 6 inches in length. The call, when once heard, is also characteristic—a shrill *coorlee* usually uttered in flight. Singly or parties on the seashore between tide marks. Also on mudflats and marshy land by tidal creeks. Extremely wary.

Specimens: *B.N.H.S.*: ♂ 6-12-18 Colāba Cove, Bombay Harbour (J. A. D. McBain); [♂ 1-9-11 Panvél, Kolāba Dist., ♂? 25-12-10 Rewdānda (P. M. D. Sanderson)].

Noted and/or shot: Gōrēgāon Creek; Bassein (Thāna Dist.) Inverarity (*J.B.N.H.S.*, ii, 45) saw a Curlew on Mahaluxmi Race Course on 26 September 1886, and EHA (*C.B.B.*, 170) writes that 'when the tide has run far out and bared the black rocks round Colāba and Breach Candy its wild and plaintive scream often comes in on the breeze'. Conditions have altered greatly, however, and we are aware of no recent record of the Curlew anywhere within town limits.

Winter visitor. Earliest date 20 August. Not uncommon across the Harbour and down the coast. Do some remain with us throughout the

year? Sinclair (*J.B.N.H.S.*, i, 164) found them on the Konkan Coast all the year round.

[At Bedi Bunder in Kathiawar H. A. observed a Curlew on 12 June. At Rozi Bunder he found both Curlew and Whimbrel common on 16 June (*J.B.N.H.S.*, xl. 122).]

**The Whimbrel:** *Numenius phaeopus phaeopus* (Linn.).

*Field identification:* Rather smaller than the Curlew but very like it in colouration, general effect and habits. 'The call, uttered in flight, is a musical *tetti, tetti, tetti, tet* with rapid intonation. The dark crown with median whitish streak are often visible with the naked eye and obvious through glasses' (Meinertzhagen).

Specimens: *B.N.H.S.* ♂ 23-9-18 Bhyandar (Lt. Tebbut); [*♂♂* 1-9-11 Panvel, Kolāba Dist.]; *St. X. C.*: 81 o 20-9-33 Versōva Flats (H. A.).

Noted: Vasora (near Andhēri), Gōdbhunder; Kihim, Alibāg, Colāba Reclamation.

Winter visitor. Earliest date 20 July; latest 23 May. Commoner than the Curlew and usually in bigger flocks. We have seen several of nearly 100 birds each. They are very fond of the stretches of mangrove marshes along our tidal creeks, and may also be seen running about feeding on the seashore by the water's edge at low tide.

Both this species and the Curlew—as indeed are most of our migratory waders provided they are large enough to be worth powder and shot—are much persecuted by local shikaries.

**The Black-tailed Godwit:** *Limosa limosa* ssp.

Inverarity (*J.B.N.H.S.*, ii, 45) shot one among the salt pans at Penn (Kolāba Dist.) in February 1884.

H. A. obtained one from a party of 3 in tidal mud at Rewās (Kolāba Dist.) on 22-11-32.

**The Bar-tailed Godwit:** *Limosa lapponica lapponica* (Linn.).

*Field identification:* Size, colouration and general effect approximately that of the Whimbrel but with a straight, not curved, bill. Occurring in the same surroundings.

Specimen: *B.N.H.S.*: o? 23-9-18 Bhyandar (Lieut. Tebbut).

Noted only near Rewās Pier—Dharamtar Creek—12-3-30; a solitary example probing the mud near the jetty. On page 319 of vol. iv. of the *Journal* 2 Bar-tailed Godwits are recorded as received by the Society from Mr. Sinclair, Alibāg.

Straggler? As pointed out by S. A. in a note on the Bhyandar specimen (*J.B.N.H.S.*, xxxiii, 716) Bombay is considerably south of its hitherto known range in the Indian Empire.

**The Terek or Avocet Sandpiper:** *Xenus cinereus cinereus* (Gulden).

*Field identification:* Size about that of the Quail, brown above, white below in winter plumage while with us. Its most diagnostic feature is the long slender black bill noticeably upcurved like the Avocet's. Legs and feet orange-yellow which is unusual among Sandpipers. Parties or flocks on the seashore and tidal mudflats about the estuaries, usually in association with other small waders.

Specimens: *B.N.H.S.*: o? 23-9-18 Bhyandar (Lt. Tebbut); *St. X. Co*: o? Thāna (Nunes).

Noted: Malād; Rewās, Kihim.

Winter visitor. Earliest date 15 September; latest 12 April.

**The Green Sandpiper:** *Tringa ochropus* Linn.

*Field identification:* Size about that of the Snipe or the Quail, Head and neck greyish-brown. Upper parts dark brown with a bronze-green gloss. Lower parts, rump and tail white. The white rump, especially, distinguishes it in zig-zag flight from the somewhat similar looking but smaller and less dark Wood Sandpiper. The bill is slender, straight and snipe-like, but shorter than the Snipe's. Its call notes *twee-twee-twee* uttered when flushed and as the bird goes off are distinctive when once heard,

Singly or couples at puddles and village tanks.

Specimens: *B.N.H.S.*: ♂ 2-1-11 Kheneri (Salsette); ♂ 16-12-18 Kūrla (S. H. Prater); *St. X. C.*: 77 ♀ 12-9-33 An dhēri, 52 ♀ 6-8-33 Gōrēgāon (H. A.). Winter visitor. Common. Earliest date 5 August; latest 9 May.

**The Marsh Sandpiper:** *Tringa stagnatilis* (Bechstein).

*Field identification:* Rather smaller than the Green Sandpiper, but like the Greenshank in general effect. Its brown upper parts are more greyish than bronze-green. Lower back and rump white; tail brownish. Bill slightly recurved, this feature being obvious only at short range and through binoculars. Usually singly by tanks and flooded fields, standing in shallow water and probing the mud often with head submerged.

Specimens: *B.N.H.S.*: [♀ 26-12-09 Panvël, Kolāba Dist. (N. B. Kinnear)]; *St. X. C.*: ♂—Trombay.

Noted and/or shot: Gōdhbunder Creek.

Winter visitor. Not common.

**The Common Sandpiper:** *Tringa hypoleucos* Linn.

*Field identification:* Slightly smaller than the Quail. Upper parts brown tinged with olive. Lower back and rump not white. White conspicuous only in outer feathers of tail. Lower parts white except breast which is suffused with pale ash-brownish. A white wing-bar conspicuous in flight. Utters *tee-tee-tee* when flushed and going off. Singly, by tanks, puddles, creeks and about rocks on the sea beach.

Specimens: *B.N.H.S.*: ♀ 6-4-01 Bombay (J. M. Mason); ♂ 12-1-08 An dhēri (N. B. Kinnear?); ♀ 19-11-17 Kūrla (S. H. Prater); ♂ 16-11-25 Gōdhbunder (S. H. Prater); ♂ 16-12-18 Bombay (S. H. Prater); ♂ 1-9-18 Bhyandar (A. P. Kinloch); ♂ 2-10-24 Kūrla (D. B. Baretto); *St. X. C.*: 174 ♀ 1-8-33 An dhēri (H. A.).

Winter visitor. Common. Birds already begin to arrive in some numbers in the first week of August and may be commonly seen till about the middle of May. Occasional individuals, however, remain in our midst throughout the year but they do not breed at this latitude.

**The Wood or Spotted Sandpiper:** *Tringa glareola* Linn.

*Field identification:* Size about that of the Green Sandpiper. Sepia brown above indistinctly spotted and marked with white. Back and rump white. Breast pale brownish. Whitish stripe above eye. Singly or small parties—larger flocks later in the season prior to emigration—by flooded fields, tanks, shallow vegetation-covered jheels, etc.

Specimens: *St. X. C.*: 123 ♂ Bassein, Thāna Dist. (H. A.).

Noted: An dhēri, Bhandūp, Powāi Lake.

Winter visitor. Not uncommon. Earliest date 14 September; latest 9 May. H. A. observed a solitary example on 20 July (35).

**The Redshank:** *Tringa totanus eurhinus* (Oberholser).

Mahrātti: *Maater*.

*Field identification:* Larger than the Green Sandpiper, and unmistakably of the tribe in general effect. Greyish-brown above, streaked and spotted with white. Back white, specially conspicuous in flight when the long slender red legs trail behind. A white bar in wings. Utters a sharp *tiwee-tiwee-tiwee* or *tew-tew-tew* as it flies off. Singly or small parties at tanks, about mangrove-lined creeks, tidal mudflats and salt pans.

Specimens: *B.N.H.S.*: ♀ 27-11-09 Hog Island, Bombay Harbour (E. Comber); ♂ 8-9-18 Bhyandar (A. P. Kinloch); ♂ 2-11-08 Bhyandar (N. B. Kinnear); [♀ 25-12-09 Panvël, Kolāba Dist. (N. B. K.)]; *St. X. C.*: 124 ♀ 13-10-33 Bassein, Thāna Dist. (H. A.).

Winter visitor. Fairly common, but not abundant. Earliest dates 29 July and 19 August; latest 25 May. On the latter date a flock flying abreast in a ribbon at about 3-400 feet in N. direction, apparently emigrating.

**The Greenshank:** *Glottis nebularia* (Gunnerus).

*Field identification:* Size about the same as or slightly larger than the Redshank. Darker greyish-brown above, with white rump. White below.

Distinguishable from the foregoing by absence of white wing-bar, by its olive green instead of red legs and by its long slender bill being slightly upcurved. Its call *tew-tew-tew* is very like that of the Redshank. Usually singly in the same surroundings as last.

Specimen: *B.N.H.S.*: ♂ 2-11-08 Bhyandar (N. B. Kinnear).

Noted: An dhēri, Malād, Mahūl, Trombay, Gōrēgāon, Gōdhubunder; Kihim, Alibāg, Dharamtar.

Winter visitor. Fairly common, but not abundant. Earliest date 8 August; latest 18 June. At 6-30 p.m. on 2 May (1930) a flock of about 100 Greenshanks was observed at Sākar Creek (Alibāg) hugging the coast and flying strongly due North in ribbon formation—all abreast—at a height of about 500-600 feet.

Almost all sandpipers and allied waders, big and small, pass locally under the name of *Timbla*.

**The Ruff and Reeve:** *Philomachus pugnax* (Linn.).

*Field identification*: Male slightly larger than the Redshank: female appreciably smaller. A wader with noticeably short sandpiper-like bill. Upper plumage in winter, white with us, brown mottled with black and buff; white below, the breast suffused with brown or buff. Small flocks, mixed with other waders on tidal mudflats and paddy stubble by creeks, etc.

Specimens: *B.N.H.S.*: ♀ 23-9-18 Bhyandar (Lt. Tebbut); *St. X. C.*: ♀ 19-10-33 Alibāg (H. A.).

Noted: Bassein (Thāna Dist.): Naugaon (Kolāba Dist.).

Winter visitor. Uncommon but possibly often overlooked or confused with other species.

**The Little Stint:** *Erolia minuta minuta* (Leisler).

*Field identification*: A diminutive wader slightly bigger than the Sparrow. Mottled greyish-brown above, white below. Outer tail-feathers brownish. Flocks on mudflats and the sea beach in association with other stints and shore birds. When disturbed the flock flies off swiftly in orderly mass formation turning and wheeling in unison and uttering a musical *wit-wit-wit* or low *tr-rr*. The black legs distinguish this bird from Temminck's Stint, the legs of which are olive green.

Specimens: *B.N.H.S.*: ♀ 21-11-08 Bhyandar (N. B. Kinnear); oo 6-4-24 Sion Causeway (S. A.); o? 26-11-25 Kūrla (D. B. Baretto).

Noted: An dhēri, Māndwa, Rewās, Alibāg (Kolāba Dist.).

Winter visitor. Common. Earliest date 25 Sept. latest 6 April.

**Temminck's Stint:** *Erolia temminckii* (Leisler).

*Field identification* difficult. Size and general effect same as of the Little Stint, but with the outer tail-feathers white. In the hand distinguishable by the shaft of the first primary being white, the others brown. In *minuta* all shafts of primaries are more or less white. Habits same as last, though in smaller flocks and perhaps more often by fresh water tanks, etc.

Specimens: *B.N.H.S.*: ♀ 23-3-85, o? 25-3-85 Bombay (EHA); *St. X. C.*: 112 ♀ Salsette, 207 ♀ Decr. 34 An dhēri (H. A.).

Winter visitor. Less common than the Little Stint. Often in association with it and with mixed flocks of other waders.

**The Curlew-Stint or Pigmy Sandpiper:** *Erolia testacea* (Pallas).

*Field identification*: Size about that of the Common Sandpiper. Upper parts grey-brown with a good deal of white streaks and mottling. Upper tail-coverts mostly white. Lower parts white with brownish wash on breast. Its diagnostic feature is the slender curlew-like bill decurved towards the tip. Parties amongst mixed flocks of small shore birds on tidal mudflats, etc.

Specimen: *St. X. C.*: 216 o? 7-10-35 Bassein, Thāna Dist. (H. A.)

Winter visitor. Common, but overlooked as a 'kūch-naī'.

**The Dunlin:** *Erolia alpina alpina* (Linn.).

*Field identification*: Size about that of the Common Sandpiper. Colouration and general effect as the last but with upper tail-coverts blackish brown, clearly noticeable in flight. The bill is decurved but to a lesser extent than in the Curlew-Stint. The proportionately longer bill is a characteristic feature

of the Dunlin as is also the rounded 'hunch back' profile when at rest. Small flocks in company with other waders on tidal mudflats and the seashore.

Specimens: 00 Decr. 1932 Trombay (Rev. Palacios): 137 ♀ 20-10-33 Rewās Kolāba Dist. (H. A.).

Noted: Andhēri.

Winter visitor. Uncommon.

**The Broad-billed Sandpiper:** *Limicola falcinellus* subspecies?

*Field identification:* Size about that of the Common Sandpiper. General effect as of the Dunlin. Upper parts ashy-brown, lower white. Breast finely streaked with brown. Its diagnostic feature is the bill which is depressed and broad. Singly or small parties, by puddles, etc. on tidal mudflats and seashore, frequently in mixed flocks of waders.

Specimens: *B.N.H.S.*: 0? 23-9-18 Bhyandar (Lt. Tebbut); *St. X. C.*: [135 ♀, 136 ♂ Rewās, Kolāba Dist. (H. A.)].

Noted about Rewādanda Creek—1st week of November 1933 (Rev. Palacios).

Winter visitor. Not common. The races cannot be differentiated in winter plumage.

**The Woodcock:** *Scolopax rusticola rusticola* Linn.

*Field identification:* Size about that of the Pigeon. General effect that of an overgrown Snipe.

In *Stray Feathers* (vol. vii, p. 525) J. D. Inverarity records one shot by R. D. Cairns of the Oriental Bank 2 miles from Thāna on Christmas Day, 1878. It was flushed in bushes at the foot of some low hills near marshy ground.

This individual was obviously an exhausted passenger. Some Woodcock regularly winter in the Nilgiris and adjacent hills, but if this is their usual route they must pass over without stopping for there is no other record of their occurring in our area.

**The Wood Snipe:** *Capella nemoricola* (Hodgs.).

*Field identification:* This and the two following, namely the Common and the Pintail Snipe are difficult to differentiate in the field except with constant practice. Size slightly larger than the Quail. Dark brown above streaked with black, rufous and buff. Very obliterative colouration, blending admirably with the surroundings. Paler or whitish below. Long, straight slender bill about 2½ inches. Singly or wisps on grass-covered marshes, squelchy paddy stubble and also on tidal mudflats along creeks with rank grass cover, mangroves or other bushes. Rising with a harsh note *pench* or *scape* like the squelching of a sodden shoe, and flying off swiftly in zig-zags.

Specimen: *B.N.H.S.*: ♀ 18-1-17 near Thāna (Major M. L. Ferrar).

One was shot near Bombay by T. H. Moore in January 1896 (*J.B.N.H.S.*, xxv, 149).

Winter visitor. Rare, but perhaps not always identified even in sportsmen's bags.

**The Common or Fantail Snipe:** *Capella gallinago gallinago* (Linn.)

*Field identification:* See *supra*.

Specimens: *B.N.H.S.*: 0? 13-1-95 Thāna (W. J. Pringle); ♀ 20-1-09 Thāna (N. B. Kinnear); ♀ 6-2-19 'Near Bombay' (H. A. W. Brent); ♀ 7-3-21 Thāna (B. C. Ellison); ♀ 3-12-23 Thāna (R. A. Spence); *St. X. C.*: [126 ♀ 15-10-33 Kihim, Kolāba Dist. (H. A.)].

Noted and/ or shot: Gōdhbunder, Tūlsi Lake, Irla, Vilé Parlé.

Winter visitor. Common. Earliest date 18 September; latest 4 May.

EHA (*C.B.B.*, 167) mentions that snipe were shot on the Flats (meaning chiefly about Mahāluxmi and Tārdeo) every year. Conditions have altered greatly since that time and suitable marshes no longer exist within town limits. The snipe have gone the way of the malarial mosquito.

**The Pintail Snipe:** *Capella stenura* (Bonaparte).

*Field identification:* See *supra*. In the hand it may readily be distinguished from the Fantail by the 26 or 28 attenuated pin feathers in the tail as against 12 to 14 normal ones in the Fantail.



Specimens: *B.N.H.S.*: o? December 1890 Bombay (E. L. Barton); ♀ 27-12-10 Bhāndūp (J. L. Symons); ♂ 25-1-13 Santa Cruz (N. B. Kinnear).

Noted and/ or shot: Gödhbunder, Vilé Parlé, Powāi Lake.

Winter visitor. Earliest date 24 September; latest 3 April. We agree with Inverarity who wrote in 1879 (*S.F.*, vii, 526) that about Thāna and on the snipe grounds across the Bombay Harbour the Pintail forms the majority in bags.

**The Jack Snipe**: *Lymnocyptes minima* Brunnich.

*Field identification*: Smaller than the Quail. Like the Common Snipe but with a metallic green and purple sheen on the back visible in the hand. Bill shorter than the Common Snipe's. Singly or wisps on marshy ground. Requires heavier cover in the nature of reeds and bulrushes than the Fantail or Pintail Snipe. Rises silently. Zig-zag flight less swift.

Specimens: *B.N.H.S.*: ♂ ♀ 25-1-05 Thāna (W. S. Millard); ♂ 8-1-10 Thāna (N. B. Kinnear); ♂ 3-12-23 Panvël, Kolāba Dist. (P. M. D. Sanderson).

Noted and/or shot; Gödhbunder, Vilé Parlé.

Winter visitor. Common.

**The Little Cormorant**: *Phalacrocorax niger* (Vieillot).

Mahrātti: *Pan-kaula*.

*Field identification*: Size about that of the Jungle Crow. All black. Long neck, stiff tail, slender bill sharply hooked at end. A water bird usually seen swimming, perched on a tree near water or sunning itself with open wings on some rock or stake. Singly or gregariously on tanks and lakes.

Specimen: *St. X. C.*: [132 ♀ 20-10-33 Rewās, Kolāba Dist. (H. A.)]

Noted: Tūlsi and Tānsa Lakes.

Resident. Not common.

*Breeding*: On 1 September (1935) H. A. found several pairs nesting on large trees in company with Night Herons in the midst of Thāna town. Most of the nests contained half fledged young. The nests are made of twigs and resemble those of the Crow. A normal clutch consists of 3 to 5 eggs, dirty chalky white, narrow and pointed at both ends.

The Indian Shag (*Phalacrocorax fuscicollis*) may also occur in our area. H. A. has doubtfully observed it at Kihim across the Harbour.

**The Indian Darter or Snake Bird**: *Ahinga melanogaster* Pennant.

*Field identification*: Size that of a small duck. A black bird with silver-grey streaks on the back, and brown head and neck. Chin and throat white, speckled with brown. Tail long and stiff. The long slender S-shaped neck, narrow head and pointed dagger-like bill are characteristic features of the Darter. When on the water only the snake-like neck and head are visible. In flight—attained by rapid wing beats as in the Cormorant—the thin neck is held outstretched. Perches in branches above water whence it tumbles down into it on alarm, diving and swimming away swiftly below the surface. Singly or small loose parties at tanks and lakes.

Resident? Not common. We have only observed occasional examples at Tūlsi and Powāi Lakes in Salsette. Also at Tānsa. Its food consists of fish which are chased and captured below the surface.

**The Red Sea Masked Booby or Gannet**: *Sula dactylatra melanops* Heuglin.

*Field identification*: Size that of a large duck. White all over except wings and tail which are chocolate brown. Naked skin of face dark slaty blue. Heavy pointed bill greenish yellow.

Specimens: *B.N.H.S.*: o? 25-7-02 Bombay Coast; o? 28-7-27 Parel, Bombay (C. Wood).

Straggler. Blown in periodically by gales of the South-west Monsoon. Other records from Bombay are:

2 specimens captured by E. R. H. Jackson of the Bombay Port Trust in 1909 and 1912 respectively (*J.B.N.H.S.*, xxi, 1334).

1 Uran 10-8-1914.

**The Persian Shearwater**: *Puffinus persicus* Hume.

In the *B.N.H.S.* Collection there is a specimen (o?) obtained at Alibāg in July 1885 by W. F. Sinclair, presumably blown in by monsoon gales.

**The Indian Spoonbill** : *Platalea leucorodia major* (Temm. & Schlegel).

*Field identification* : A large snow-white egret-like bird with a distinctive flat spatula-shaped bill. Singly or flocks, by tanks, jheels and marshes.

Local visitor? Rare. H. A. observed it on the tidal mudflats near Avās (Kolāba Dist.) across the Harbour, on 21-10-32. It is not uncommon in Nasik District.

**The White Stork** : *Ciconia ciconia ciconia* (Linn.).

*Field identification* : A large long-necked, long-legged egret-like bird standing about 4 feet to the top of its head. White—with black wing-quills. Legs and the heavy pointed bill red. Singly, pairs or small parties on and about marshes.

Specimen : *B.N.H.S.* : ♂? 11-11-25 Kūrla (D. B. Baretto).

Noted : Sion mudflats (a solitary example 10-11-27). One seen from the train at Bassein (on mudflats).

Winter visitor. Rare.

**The White-necked Stork** : *Dissoura episcopa episcopa* (Bodd.).

*Field identification* : Similar to but smaller than the White Stork—standing about 3 ft. to top of head. Black except neck, abdomen and undertail which are white. The crown is black and looks like a padre's skull cap. Singly, by water or marsh.

S. A. observed a solitary example on the edge of Vihār Lake 16-3-24 and a pair on Sākar Creek, near Alibāg, in April 1930.

Local migrant. (Straggler?) Rare.

**The Painted Stork** : *Ibis leucocephala leucocephala* (Pennant).

*Field identification* : Size about that of the White Stork. White, closely barred and marked with metallic black above, and a black band across breast. Striking rose-pink about the shoulders. Long, pointed, heavy yellow bill slightly decurved near tip. Unfeathered yellow face. Pairs or parties, by tanks and marshes.

Specimen : *B.N.H.S.* : ♂?—Bombay Harbour (W. S. Millard).

Straggler. There are no other records and we have not come across this stork in our neighbourhood.

**[The Open-billed Stork** : *Anastomus oscitans* (Bodd.).

*Field identification* : Size small for stork. Greyish-white with black in wings. Distinctive reddish-black bill with the mandibles not fitting closely but leaving a narrow gap between them. Pairs or flocks, about tanks and marshes.

S. A. noted a couple at Vaishwi Tank near Alibāg town on 19 May 1930, and H. A. observed a large flock at Wassin (opposite Rewās) in Dharamtar Creek on 23-11-32. The birds were on a soft squelchy tidal mudflat in association with numerous ducks and waders.

Local migrant. Rare.]

**The Eastern Purple Heron** : *Ardea purpurea mauillensis* Meyen.

*Field identification* : A large slender egret-like bird about the size of the Open-bill, with long thin S-shaped neck and pointed dagger bill. Bluish-grey and slaty with neck and head chiefly rufous. Breast and abdomen black and chestnut. A long black crest. Typical heron flight with neck drawn in and legs trailing behind, unlike storks and cranes which fly with neck extended. Solitary, usually standing in water at edge of reed-covered tank or on mudbank in creek, etc. Stalks along the edge of reed-beds in knee-deep water, peering intently into it with poised bill, 'freezes' suddenly and jabs its bill to snap up some fish or frog with lightning rapidity.

Specimen : *B.N.H.S.* : [♀ 2-12-12 Bassein, Thāna Dist. (R. dos Remedios)].

Noted : Powāi and Tūlsi Lakes.

Resident? Not common. No breeding record from our area.

**The Common Grey Heron** : *Ardea cinerea cinerea* (Linn.).

*Field identification* : Size and general effect as above but ashy-grey with whitish crown, neck and abdomen. Long black crest. A conspicuous black

and white line down middle of foreneck. Habits, etc. same as of the Purple Heron.

Noted: Powāi Lake (on reedy shallow margin); Gōdhbunder Creek (in mangroves and tidal mud along banks); Kihim (on rocky seashore).

Resident? Not common. No breeding record from our area.

**The Large Egret:** *Egretta alba* subspecies?

*Field identification:* Size about that of the Heron. Pure white, with black bill, legs and feet. Solitary, at edge of tanks and creeks.

Noted: Powāi Lake: Rewās (Kolāba Dist.).

Status? Rare. The note, usually uttered in flight, is a harsh *Kraa-krr.*

Navarro found this bird breeding with *E. intermedia*, *A. grayii* and *E. garzetta* at Karjat in July.

**The Indian Smaller Egret:** *Egretta intermedia intermedia* (Wagler).

*Field identification:* Like the Large Egret but smaller. Usually gregariously in same biotope as last.

Noted: Powāi and Tūsi Lakes. Rewas (Dharamtar Creek) Kolāba Dist.

Resident. Fairly common.

*Breeding:* By the middle of May the birds have commenced putting on their dainty ornamental breeding plumes on the head, breast and back. We have no breeding record in our area, but Barnes (*J.B.N.H.S.*, vi, 142) found nests on a tree near 'Wassind' (Vāsind) Station on the G.I.P. Railway, about 50 miles from Bombay, in July. The birds nest in colonies, building crow-like twig nests in trees, either by themselves or in association with herons and storks. The normal clutch consists of 4 pale bluish-green eggs.

**The Little Egret:** *Egretta garzetta garzetta* (Linn.).

*Field identification:* Smallest of the three. Size that of the more familiar Cattle Egret. Pure white in colour and a small replica of the preceding two in all respects. Usually flocks in same biotope and often in association with the Smaller Egret.

Specimen: *B.N.H.S.*: [♂ 12-5-18 Kihim (S. H. Prater)].

Noted: Powāi and Tūsi Lakes, Gōdhbunder; Rewās.

Resident. Fairly common.

*Breeding:* Barnes (*J.B.N.H.S.*, vi, 144) records a large colony nesting in a tree near Vāsind village (G.I.P. Railway—ca 50 miles from Bombay) in July. In the same tree were also nesting Cattle Egrets and Paddy Birds. The nests are similar to those of the foregoing species, the eggs differing only in being smaller. There are several mixed egret colonies round Bombay, e.g. Vajrabai Hot Spring, Karjat; and further observation might produce interesting information. Some years ago these egrets used to be extensively and lucratively farmed in Sind for the sake of their ornamental breeding plumes. With the change in women's fashions, egret feathers no longer carry the same demand, and prices have also dwindled accordingly. But some small farms exist even to this day. Egret farming could still become a profitable cottage industry if export of farm produced feathers to foreign countries were licensed and their production properly organised and controlled. A good account of Egret Farming in Sind will be found on pages 748-749 of vol. xxviii of this *Journal*.

**The Cattle Egret:** *Bubulcus ibis coromandus* (Bodd.).

Mahrāṭṭi: *Gochandi-khao*; Hind.: *Gai-bagla*.

*Field identification:* A familiar lanky bird about the size of a country hen with longish, pointed yellow bill. In young birds the bills are black and they are then easily confused with the Little Egret. Pure white and very like the Little Egret except in the breeding season when it acquires golden buff plumes on head, neck and back. Gregarious; usually in attendance on grazing cattle, snapping up grasshoppers, etc. disturbed in the animals' progress. Often far from water.

Specimen: *B.N.H.S.*: ♂? 8-9-18 Bhyandar (A. P. Kinloch).

Noted: *City:* Bhūleshwar, Khētwardi (1912), Chowpāti, Malabār Hill, Mahāluxmi; *Suburbs and Salsette:* Bandra, Khār, Chembūr, Powāi Lake, Gōdhbunder, etc.

Resident. Common. S. A. has observed an individual for days at Bhūleshwar, in the heart of the bustling bazaar, on a tree partly overhanging a half dry temple tank and partly a halwai's shop. The bird spent its time picking off the flies disturbed off the sweetmeats in the stall beneath from time to time and alighting on the tree for respite! Flies appear to be greatly relished. We have noted another individual at Chowpāti who was in the regular habit of eating flies off a toddy pot hung on a tapped coconut palm for collecting the juice.

*Breeding*: By the first week in May, many birds have already donned their golden breeding dress, and by the end of that month this is general. Building operations commence by about the middle of May and nesting continues till August. The birds nest in colonies selecting some large tamarind or other tree, in or near a village, for the purpose. This tree is usually shared by Paddy Birds and Little Egrets. We have noted such nest colonies opposite Bandra railway station, in An dhēri bazaar, in Borivli village, and at Mahāluxmi. The same trees are used for several years in succession. 15 to 25 nests is not an unusual number for a colony. The nests are untidy twig structures like those of the Crow. Three to five eggs form a normal clutch. They are a pale skim milk blue in colour.

The stomach of a fledgling examined was packed with grasshopper remains, a small crab and about 200 Blue-bottle flies (*Musca vomitoria*).

Barnes (*J.B.N.H.S.*, vi, 142) found the Cattle Egret nesting at Vāsind (G.I.P. Railway) in July.

#### The Indian Reef Heron : *Demigretta asha* (Sykes).

*Field identification*: Size about the same as, or slightly larger than the Cattle Egret. Very similar in general effect to the Small Egret but found in 2 colour phases: (1) White, (2) Slaty-grey. Occasional birds are intermediate being partly white and partly grey. Singly or pairs about rocky seashore, mangrove-lined creeks and tidal mudflats.

Specimen: *B.N.H.S.*: [21-11-10 Panvël, Kolāba Dist. (N. B. Kinnear)]

Noted: Mahim, An dhēri, Bhyandar, Mahūl, Kihim, Rewās, Hornby Vellard.

Status? Our records are only between 18 October and 20 May. Not uncommon but sparingly.

#### The Indian Pond Heron or Paddy-Bird : *Ardeola grayii* (Sykes).

*Field identification*: Size about the same as or slightly less than the Cattle Egret. Most of the plumage white, concealed by an earth-brown mantle so that when at rest on the edge of a tank the bird is almost invisible. As soon as it rises, however,—usually with a croak—the white wings, back and underparts flash into prominence. Singly or gregariously at every piece of water-pool, puddle or tank, inundated paddy-field, creek or on the seashore. Especially fond of village tanks in the process of drying up.

Specimen: *B.N.H.S.*: ♂ juv. 14-7-13 Colāba, Bombay (S. H. Prater).

Resident. Very common. Its food consists for the most part of frogs. Its normal method of hunting is to wade into water or stand poised on the edge as still as a dummy and dart at any prey coming within striking range.

*Breeding*: By about the middle of April the birds commence to don their nuptial plumage. The back becomes rich maroon. A long white occipital crest is developed and the legs and feet—normally greenish-yellow—assume a beautiful salmon-pink tint. By the middle of June the majority of birds are in full breeding dress. Most nests are found between July and September. Paddy-birds breed in colonies in association with other egrets and Night-Herons. Their nests are untidy platforms of twigs like those of the Crow, built in large trees such as tamarind or mango. We have observed nest colonies at Bandra (opposite railway station), Victoria Gardens (Byculla), and in the midst of Thana town. Barnes (*J.B.N.H.S.*, vi, 142) found nests at Vāsind (about 50 miles from Bombay) in July. A normal clutch consists of 3 or 4—rarely 5—pale greenish-blue eggs.

#### The Indian Little Green Heron : *Butorides striatus javanicus* (Horsf.).

*Field identification*: Slightly smaller than the Paddy-bird. Above slaty or blackish-grey glossed with bronze green; below paler grey. Singly by rocky

or mangrove-lined tidal creeks, pools, etc. Occasionally found at rocky hill streams.

Specimens: *B.N.H.S.*: ♂ 3-11-20 Kennerly Island, Bombay Harbour (V. S. La Personne); 3 nestlings 30-5-37 Gödhbunder (C. McCann).

Noted: Mahul, Andheri, Powai and Tüsi Lakes.

Resident. Fairly common, but unobtrusive. The stomach of a specimen contained shrimps and mudfish (*newtas*).

*Breeding*: On 30 May Mr. C. McCann found a nest in a mangrove bush near Gödhbunder Creek. In structure it was like that of the Paddy-bird. It contained 3 young in down—with the wing quills sprouting—which were able to clamber about the branches.

#### The Night Heron: *Nycticorax nycticorax nycticorax* Linn.

Mahrätti: *Raat-baggal* or *Raat-koku*.

*Field identification*: Larger than the Paddy-bird. Of the same general effect, but with an appreciably stouter bill. An ashy-grey bird with black crown, nape and long crest at back of head, the last with some white feathers in it. Lower parts chiefly whitish. Young birds are brown, streaked with rufous. Their underparts are white broadly streaked with dark brown. Colonies, roosting in favourite large trees during the day and flying out in parties at sunset with loud raucous *kwaaks* to feed at tanks and creeks.

Specimens: *B.N.H.S.*: ♂ 28-7-14 Carnac Bunder, Bombay (Counsel); ♀ 27-11-99 Hog Island, Bombay Harbour (E. Comber).

Hume (*S.F.*, iv, 415) disturbed a large colony on Elephanta Island and shot a few in January 1875.

Resident. Common. Considered finest 'game bird' in Salsette and much persecuted by local 'sportsmen'!

*Breeding*: The Night Heron nests in colonies which often extend over several adjacent trees, between June and September. They build the usual twig nests of the Crow pattern often sparsely lined with leaves. We have records of large colonies on *Pithecolobium* trees in Victoria Gardens, Bombay, and in Thāna town where almost every available Banyan and Peepal tree is utilised. The eggs—usually 3 or 4—are pale greenish-blue in colour. The young birds soon leave the nest and clamber about the neighbouring branches keeping up an incessant *click, click, click*, etc. The din which a nesting colony at this stage produces can be heard fully half a mile away.

Stomachs of fledgling Night Herons examined by us contained among other things a fresh unbroken Night Heron egg, a leg of embryo of same, remains of *Gerardia praevestiana* and shrimps, etc.

Barnes (*J.B.N.H.S.*, vi, 415) found the Night Heron breeding on islets in the Vihār Lake, and at Elephanta, in August.

#### The Yellow Bittern: *Ixobrychus sinensis sinensis* (Gmelin).

*Field identification*: Somewhat smaller and slenderer than the Paddy-bird but of the same general effect. Yellow, brown, rufous and chestnut predominating in plumage. Black crest. Singly, by edge or reedy swamps and occasionally mangrove-lined creeks. Unobtrusive, creeping away surreptitiously when suspicious.

Specimens: *B.N.H.S.*: ♂ 25-1-09 Thāna (N. B. Kinneary); *St X. C.*: 268 ♂ juv. 21-11-36 Powāi Lake (H. A.).

Resident. Not common.

#### The Chestnut Bittern: *Ixobrychus cinnamomeus* (Gmelin).

*Field identification*: Similar to above, but with upper parts chestnut-cinnamon, lower pale chestnut. Habits, etc. same as of the Yellow Bittern.

Noted: Powāi Lake; Kihim (Kolāba Dist.).

Fairly common among the reeds at Powāi Lake. Inverarity (*J.B.N.H.S.*, ii, 45) shot them at Gödhbunder and also one near Penn (Kolāba Dist.) on 28-11-1886.

*Breeding*: H. A. observed a bird carrying twigs on two consecutive days in August, near Powāi but failed to find the nest. Navarro has found several nests at Khandala and Karjat during May, June and July.

**The Bittern :** *Botaurus stellaris stellaris* (Linn.).

*Field identification :* Considerably larger than the Paddy-bird. Short, stout, pointed bill and large feet. A buff coloured bird of the general effect of the Paddy-bird with black back and blackish streaks and barring on rump and in the lower plumage. Singly, in reed beds and shrubbery on marshes.

Specimen : *B.N.H.S.* : ♀ 4-12-16 near Thāna (A. F. Forbes).

Winter visitor. Rare. We have not come across the Bittern in our area, but J. D. Inverarity (*S.F.*, vii, 526, 1879) believed it to be not uncommon, though seldom seen. In 8 years he had only seen three. One he shot on 22-10-1877 on the 'Flats' half a mile from Byculla Club, close to the railway and 'within 200 yards of the Foras Road which crosses the flat from Bombay to Worlee'. The second he saw on 12-1-1878 on Bhiwandi Tank and the third he shot on 24-2-1878 at Panvél. He also saw several others subsequently (*J.B.N.H.S.*, ii, 44). Mr. Kotwal shot a specimen at Parle on the 3rd January 1939.

**The Flamingo :** *Phoenicopterus ruber antiquorum* Temm.

Marāthi : *Rohi*.

EHA (*C.B.B.*, 167) records seeing an example not far from Hog Island in Bombay Harbour. In April and May 1930 two flocks (or the same flock?) of about 12 birds were observed at Alibāg and Kihim (Kolāba Dist.), respectively flying along the seashore in a northerly direction. There are several other records for May and this bird is probably a common passage migrant.

**The Lesser Flamingo :** *Phoeniconaias minor* (Geoffr.).

In the old card catalogue of birds in the *B.N.H.S.* Collection, prepared by Mr. N. B. Kinnear, there is listed a specimen ♀ 2-1-1898 Thāna (J. Mason).

We have not seen the specimen and have no further details.

**The Nukta or Comb Duck :** *Sarkidiornis melanotos* (Pennant).

*Field identification :* Larger than the domestic duck. Black above glossed with green and blue; white below. Head and neck white speckled with black. A comb or knob at forehead near base of bill in the male.

Inverarity (*J.B.N.H.S.*, ii, 45) records the shooting of a solitary young of the year at Penn (Kolāba Dist.) on 28-11-1887. We know of one other shot at Kihim (Kolāba Dist.) in May a few years ago.

Local straggler.

**The Cotton Teal :** *Nettapus coromandelianus* (Gmelin).

*Field identification :* The smallest of our ducks. Size between the Pigeon and the Jungle Crow. Rather similar in colouration to the Nukta. Bill goose-like, not as flat as the duck's. In flight whitish edge of wing conspicuous in male.

Specimens : [♂ ♀ 7-12-09 Daman Road, B.B. & C.I. Rly. (R. L. Sinclair)].

Noted : A pair on Powāi Lake 30-11-34 (H. A.). Inverarity (*J.B.N.H.S.*, ii, 46—1887) saw large flocks at Neral below Matheran. One shot near Karjat.

Status? Probably local straggler. Rare.

**The Lesser or Common Whistling Teal :** *Dendrocygna javanica* (Horsf.).

*Field identification :* Smaller than the domestic duck. A chestnut coloured duck confusable with no other of the same size. Small flocks. Shrill whistling notes constantly uttered on the wing distinctive. Flight rather feeble and unducklike, reminiscent of the Jacanas.

Specimens : *B.N.H.S.* : ♂? 22-5-26 Mahadalla Tank, Malād (E. Henricks); [♂ 29-11-15 Kalyan (W. S. Millard)].

Noted : Powāi Lake, Irla; Kihim (Kolāba Dist.) on rocks on seashore! A flight of about 40 birds was seen at Hornby Vellārd on 6-11-38. They settled out in the bay well out of range, but passing the same way a couple of hours later, we saw a swimmer trying to retrieve two winged birds, and a man with a gun watching the proceedings. It may be an achievement to shoot wild duck in Bombay City, but unless some sanctuary is allowed to game birds (especially a resident species) we shall soon be exterminating them.

Resident? Uncommon and in small numbers. Possibly breeds around Powāi Lake.

**The Sheldrake :** *Tadorna tadorna* (Linn.).

Mr. C. McCann observed a small party on Tūsi Lake some years ago. Other records from the Deccan show that this bird occasionally straggles further south.

**The Ruddy Sheldrake or Brahminy Duck :** *Casarca ferruginea* (Voeg.).

Hindustāni : *Chakwa*.

*Field identification :* Larger than the domestic duck. Orange brown with a shiny green patch on the predominatingly black and white wings. Head and neck buff. Pairs or small parties.

W. F. Sinclair (*J.B.N.H.S.*, i, 166) observed a pair in Bombay Harbour (ca. 1886). H. A. noted a party of 4 at a brackish pool on a tidal mudflat near Rewās (Kolāba Dist.) on 22-11-32.

Winter visitor. Straggler? It is common round Nasik and in the Deccan.

**The Mallard :** *Anas platyrhyncha* Linn.

*Field identification :* The ancestor of our domestic duck, equal to it in size and same in colouration as the green-headed plumage often seen. The female is dark brown with buff streaks producing a game bird pattern.

The only records of its occurrence we have are (1) that of E. H. Aitken (*J.B.N.H.S.*, xiii, 398) who says that owing to the severe drought in Gujerat and the Deccan a few were seen about Bombay in the winter of 1900 (2) Sinclair (*J.B.N.H.S.*, iii, 71) has recorded one from Nagotna in Dharamtar Creek (3) One was shot near Panv̄l on 17 November (*J.B.N.H.S.*, xxix, 1052).

**The Spot-bill or Grey Duck :** *Anas poecilorhyncha poecilorhyncha* Forster.

*Field identification :* Size that of the domestic duck. Rather like the female Mallard in colouration with some white in the wings and two orange-red spots at base of bill on either side of forehead.

Specimen : *B.N.H.S.* : [♂ 7-12-09 Daman Road, B.B. & C.I. Rly. (R. L. Sinclair).]

Straggler. Aitken (*J.B.N.H.S.*, xiii, 398) mentions the Spotbill occurring in or near Bombay in the winter of 1900 due to the drought in Gujerat and the Deccan. S. A. observed a party of 4 birds flying over Kihim (Kolāba Dist.) on 1-10-30.

**The Gadwall :** *Chaulelasmus streperus* (Linn.).

*Field identification :* Smaller than the domestic duck. General aspect of plumage pale brownish-grey with rufous head and neck. A black-and-white wing-bar particularly conspicuous in flight, and a chestnut patch on wing. Underside white. Female : mottled dark and light brown with whitish underparts and wing-bar as in male.

Specimens : *B.N.H.S.* : [♂ ♀ 26-12-09 Panv̄l, Kolāba Dist. (N. B. Kinnear); ♀ 15-6-90 Alibāg (W. F. Sinclair).]

Noted and/ or shot : Andh̄eri, Chembūr ('kutchra-patti'), Trombay; Kihim. Winter visitor, in small numbers. Not uncommon. Of bags of 14 and 7 ducks made near Chembūr, two and three respectively were Gadwall.

**The Wigeon :** *Mareca penelope* (Linn.).

*Field identification :* Smaller than the domestic duck. General aspect pencilled grey. Chestnut head with cream coloured patch on its forepart, combined with the brownish-pink breast and the blue-grey bill suffices to identify the male. Female rather like the female Gadwall but lacks the wing-bar. The blue-grey bill is a diagnostic character in both sexes.

Specimen : *B.N.H.S.* : [♂ 26-12-09 Panv̄l, Kolāba Dist. (N. B. Kinnear).]

Noted and/ or shot : Santa Cruz; Kihim.

Winter visitor. Uncommon.

**The Common Teal :** *Nettion crecca crecca* (Linn.).

*Field identification :* Our second smallest duck, only slightly bigger than the Cotton Teal. Male : pencilled greyish colour. Chestnut head with a broad

metallic green band running through the eye, lined on either side with whitish. A tri-coloured wing-bar—black, green and buff—especially conspicuous in flight. Female rather like female Gadwall with a metallic green and black wing-bar.

Specimen: *B.N.H.S.*: ♀ 7-10-24 Lamzai, near Kūrla (D. B. Baretto).

Noted and/ or shot; An dhēri, Santa Cruz, Bassein, Thāna, Gōdhbunder, Tūlsi Lake; Naugaon (Kolāba Dist.).

Winter visitor, in small numbers. Not uncommon.

**The Pintail**: *Dafila acuta* (Linn.).

*Field identification*: Slightly smaller than the domestic duck. Male; upper plumage pencilled greyish. Head brown with a white band on either side running down into the white neck and underparts. Its chief characteristic is the long, pointed pin-like central tail feathers which extend beyond the tail. The elongated body, the long slender neck and pointed tail usually help to recognise the drake. Female: mottled brown and buff. In general rather like the females of the Gadwall and Wigeon but slenderer in build.

Specimens: *B.N.H.S.*: [♀ 26-12-09 Panvēl, Kolāba Dist. (N. B. Kinnear).]

Noted and/ or shot: Bassein (Thāna Dist.), Chembūr, Trombay ('Kutchra-patti'), Kihim.

Winter visitor in small numbers. H. A. has observed a small flock among the rocks on the seashore at Kihim (Kolāba Dist.).

**The Garganey or Blue-winged Teal**: *Querquedula querquedula* (Linn.).

*Field identification*: Slightly larger than the Common Teal. Male recognisable by his pink-brown white-speckled head with the broad conspicuous white eyebrow and by the bluish-grey on his wing shoulders. The female resembles the females of so many ducks of the same size that without some practice it is difficult to recognise her by herself.

Specimen: *B.N.H.S.*: ♂ 7-12-09 Daman Road, B.B. & C.I. Railway. (R. L. Sinclair).

Noted and/ or shot: Naugaon and Rewās (Kolāba Dist.).

Winter visitor. Not common.

**The Shoveller**: *Spatula clypeata* (Linn.).

*Field identification*: Somewhat smaller than the domestic duck. More characteristic than its plumage and unfailing as a recognition mark is its peculiar flat shovel-shaped bill, considerably broader at tip than at base. This is possessed by both sexes though they differ considerably in colouration.

Specimen: *B.N.H.S.*: ♂ 5-12-99 'Thāna' (purchased).

Noted and/ or shot: Trombay ('Kutchra-patti'), Rewās (Dharamtar Creek), Waklan (near Mumbra), Alibāg (Vaishwi Tank).

Winter visitor in small numbers. Not uncommon. Latest date 19 May.

**The Red-headed Pochard or Dun Bird**: *Nyroca ferina ferina* (Linn.).

*Field identification*: A squat duck, somewhat smaller than the domestic bird, recognisable by its rotund shape and the conspicuous tri-coloured plumage of the male—head chestnut; breast, rump and hind parts black; body pencilled grey. The female is predominantly dirty grey-brown.

Specimen: *B.N.H.S.*: ♀ 8-10-93 Bombay Harbour (W. S. Millard).

Noted and/ or shot: Bassein, Chembūr, Powāi Lake.

Winter visitor in small numbers. Not uncommon. Out of 2 bags of 7 and 14 duck, one and 2 respectively were of this species.

**The White-eyed Pochard**: *Nyroca rufa rufa* Linn.

*Field identification*: Smaller than the domestic duck. General aspect of plumage rufous-brown and blackish-brown with a whitish wing-bar. Abdomen white. Female duller coloured.

Specimen: *B.N.H.S.*: ♀ 17-11-08 An dhēri (N. B. Kinnear).

Noted and/ or shot: Kihim and Alibāg (Kolāba Dist.).

Winter visitor. Not uncommon as wildfowl go in our area. In the cold weather of 1931 we observed fairly large flocks floating on the sea not far from the shore (at Kihim) but always well out of gunshot. At dusk—often



after it was quite dark—the birds regularly flighted inland in parties and in twos and threes taking the same route every evening. Similarly, W. F. Sinclair (*J.B.N.H.S.*, xiii, 191) writes: 'This is the sea duck of Alibāg Coast, where flocks not exceeding 50 were constantly to be observed in winter. They generally rode just outside the surf where they were safe from disturbance from passing boats. It is likely that they used the sea as refuge during the day and fed inland at night.'

**The Scaup** : *Nyroca marila marila* (Linn.).

Aberrant straggler. J. D. Inverarity (*J.B.N.H.S.*, ii, 45) shot a female on a small tank near Panvël on 13-1-1884. No other record.

**The Tufted Pochard** : *Nyroca fuligula fuligula* (Linn.).

*Field identification* : Size and rotund shape of the Red-headed Pochard. Male black and white with a conspicuous black tuft at back of head of same colour. Female like male but brown where he is black and lacking the crest.

Specimen : *B.N.H.S.* : ♂ 5-12-99 Thāna.

Noted : Alibāg (Vaishwi Tank). Inverarity (*J.B.N.H.S.*, ii, 45) records it near Penn, Kolāba Dist., on 28-11-1887.

Winter visitor. Scarce. Latest date 14 March. Most duck visiting or passing over Bombay and the surrounding neighbourhood, take refuge on the sea during day time, and flight in to feed in the evening. Even the essentially fresh water duck like Wigeon and Pintail are often seen beyond the surf during the day.

**The Goosander** : *Mergus merganser merganser* Linn.

Aberrant straggler. E. H. Aitken (*J.B.N.H.S.*, ii, 56) shot one (either ♀ or immature ♂) on 2-12-1886 at Sheva on the east side of, and across Bombay Harbour. It was playing along in a shallow sheet of water forming a reservoir of the salt works. No other record.

**The Little Grebe or Dabchick** : *Podiceps ruficollis capensis* Salvadori.

Mahrātti : Pān-būrki.

*Field identification* : Size about that of the Pigeon. A drab coloured water bird with short pointed bill and practically no tail. Gregariously, on village tanks, etc. swimming about in open water or among the floating weeds, and diving at the least suspicion.

Specimens : *B.N.H.S.* : ♂ 12-3-93 Thāna (J. M. Mason); ♀ 19-11-17 Kūrla (S. H. Prater); ♂ 6-12-18 Colāba Cove, Bombay Harbour (J. A. D. McBain).

Noted : Dhobi Talao, Gwālia Tank and Babulla Tank (Mazagon) before they were filled up; Mahāluxmi, Parēl, Andhēri, Chembūr, Powāi Lake, etc.

Resident. Common. Present on practically every village tank and congregating on larger sheets of water as the former gradually dry up in the hot weather. Thus on Vaishwi Tank, which provides the water supply to Alibāg town, S. A. counted 132 individuals on 19 May (1930) when most of the smaller tanks in the neighbourhood were quite or almost dry. A couple of months previously the number of Dabchicks on this tank had been considerably smaller. The call is a sharp tittering often heard when the birds are disporting themselves of an evening. They can seldom be induced to fly. On taking alarm they either dive below or patter along the surface for some distance vibrating their diminutive wings rapidly. When once started on the wing, however, they fly well and often for considerable distances. Their food consists of water insects and their larvae, tadpoles and small crustaceans.

*Breeding* : The season is not sharply defined. H. A. found a nest in a mill pond at Mahāluxmi in September, and another on the village tank at Kihim (Kolāba Dist.) in October. Fry (*J.B.N.H.S.*, xxi, 275) took 3 clutches of eggs from the 'Mahāluxmi Pond' between 16 November and 31 March. On 22-11-34 H. A. observed a juvenile in downy striped plumage with red beak on Konkan Tank, not far from Mumbra (Thāna Dist.). The nest is a rough pad of sodden weeds placed on floating vegetation. A normal clutch consists of 3 to 5 eggs. These are white at first but soon get discoloured to dirty brownish by the constant soaking and contact with the sodden weeds.